

## ABSTRACT

The present disclosure is directed to a method and system for analyzing network performance by creating benchmark test results when the computer network is initialized, and subsequently testing the network while operational to determine degradations. This method and system can proactively determine problems before they result in network failures, or immediately detect network failures even before the user is aware of them. In one aspect, the disclosure is directed to a method of monitoring at least one computer network from a remote location. The method includes benchmark-testing at least one computer network with test data provided from the remote location to obtain benchmark test results. Often, benchmark-testing is performed when the network is initialized. Once operational, the remote location will perform operational-testing of at least one computer network with sample data provided from the remote location to obtain operational test result. Operational-testing is performed while at least one computer network is carrying live data storage traffic. The operational test results are compared to the benchmark test results to determine network degradation. Immediate failures can be determined as well as trending of test results can be used to predict failures.